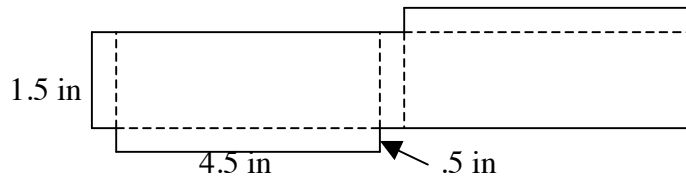


For each question, you need to find the answer and show your work. Each problem is worth 3 points: one for the correct answer and two for showing your work. For some problems, you may just need to write out how you know you have the correct answer.

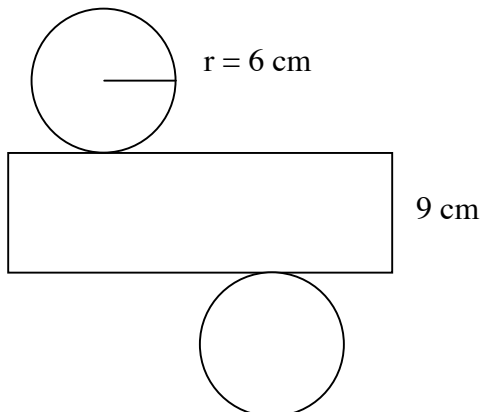
1. A cylinder has a base radius of 5 cm and a height of 11 cm. Draw a picture and find the surface area to the nearest centimeter.

2. A square pyramid has the following dimensions: Length of a base edge = 20 in and slant height = 16 in. Find the surface area of the pyramid.

3. Find the surface area to the nearest tenth.



4. Find the surface area to the nearest tenth.



5. The radius of a baseball is 2.75 inches. What is the surface area of a baseball to the nearest tenth of a square inch?

6. The length of each side of a cube is 12 cm. What is the surface area of the cube?

7. A sculpture in the shape of a cube has an edge that is 9 ft long. What is the surface area of the figure?

8. Find the surface area of a square pyramid with base edge of 8 ft and slant height of 6 ft.

9. A sphere has a radius of 4 inches. To the nearest inch, what is the surface area of the sphere?

Open-Ended Question: Answer the following question on a separate piece of paper. Make sure as you answer the open-ended question that you show your work AND explain how you know you are doing the correct work. YOU MUST EXPLAIN WHAT YOU ARE DOING!!!

The surface area of a cube is 54 in^2 .

A. What is the length of each side?

B. If the length of each side is doubled, how does this change the surface area? Does doubling the length of each side in a cube always create this same change proportionately?